

NOTES

**PLACEMENT:** Do not place concrete barrier for at least 72 hours after concrete in slab has taken initial set.

**REFLECTORS:** Place a white reflector on top of concrete barrier at 30'-0" spacing between ends of barrier. See Dtl. Dwg. No. 606-60 for reflector detail. Include the cost of reflectors in the unit price bid for Barrier Rail - Cast in Place - Br.

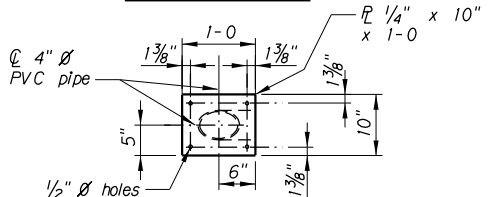
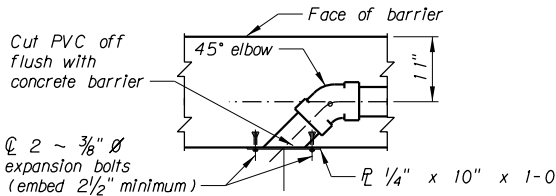
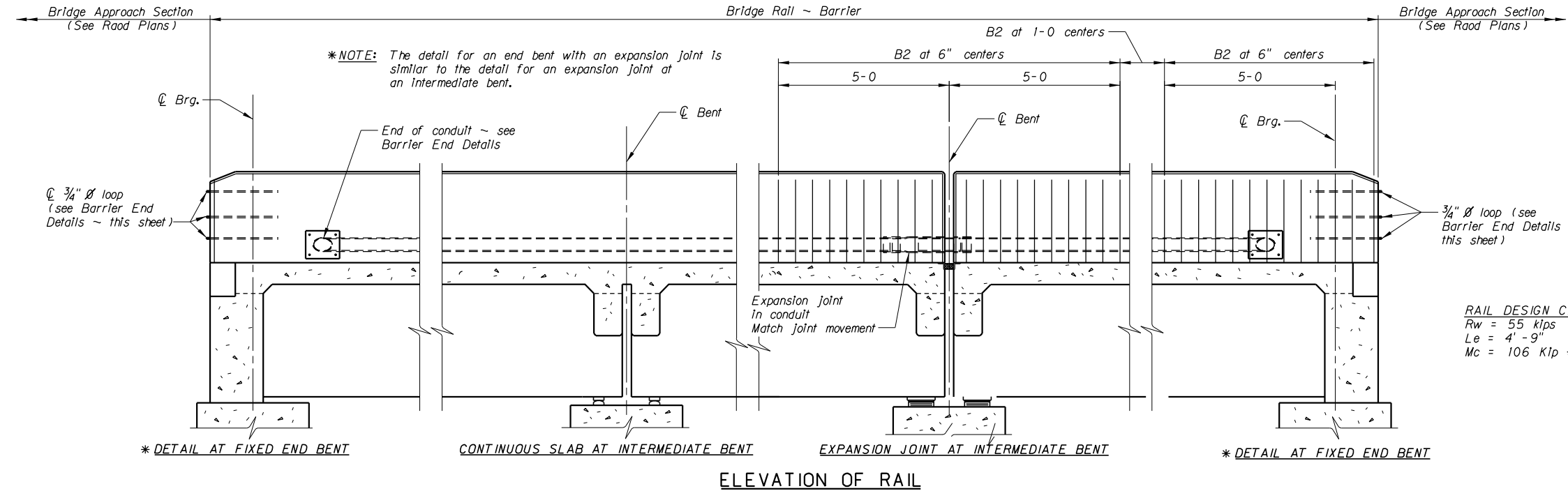
**PAYMENT:** Include all costs associated with reinforcing steel in the barrier in the unit price bid for Reinforcing Steel - Epoxy Coated. Include all other costs associated with the barrier in the unit price bid for Barrier Rail - Cast in Place - Br. See Specifications.

**EXCEPTIONS:** Use details shown on this drawing only as they apply to the project. Anchorage details may vary. Refer to other drawings for variations in these details.

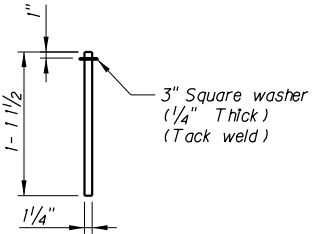
**RAIL WEIGHT:** For informational purposes only, the rail weight is approximately 355.0 lb/ft.

**PVC CONDUIT PIPE:** Omit 4" Ø PVC conduit pipe in barrier on Interstate structures.

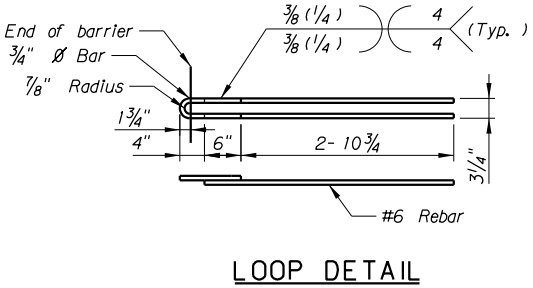
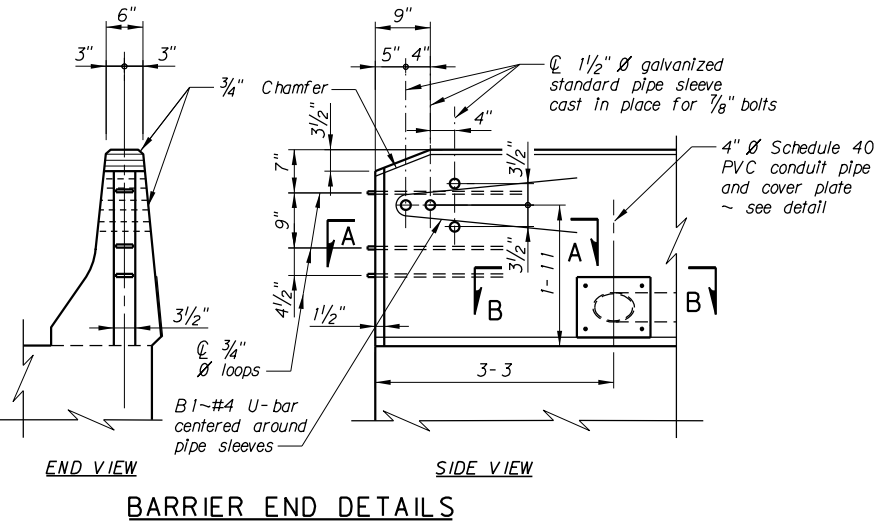
RAIL DESIGN CAPACITY  
Rw = 55 klps  
Le = 4'-9"  
Mc = 106 Klp \* in / ft



NOTE: Galvanize plates in accordance with AASHTO M 111. Galvanize expansion bolts, nuts and washers in accordance with ASTM A 653 or AASHTO M 111.



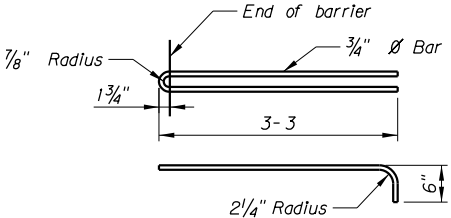
NOTE: Use connecting pins conforming to AASHTO M 270, Grade 36.



NOTE: Use reinforcing steel conforming to ASTM A 706, Grade 60 for rebar being welded to loops.

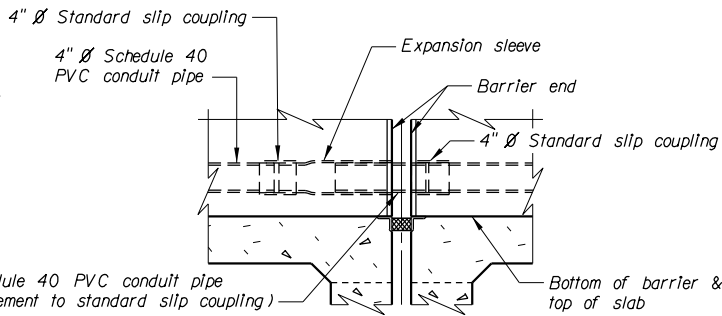
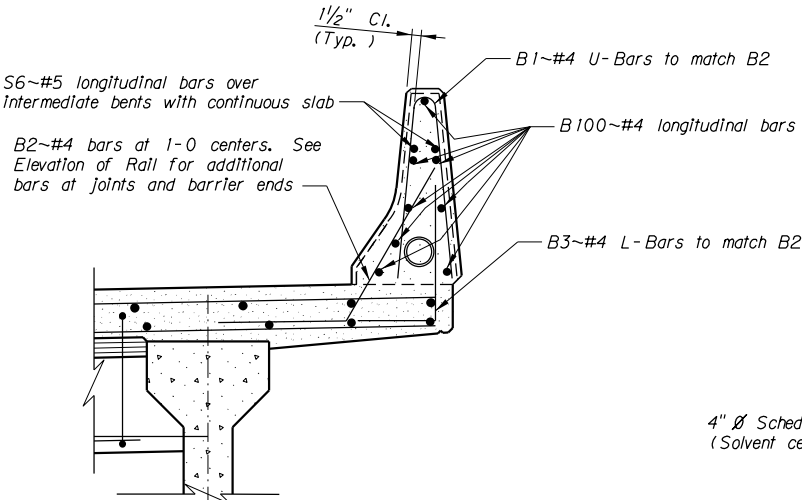
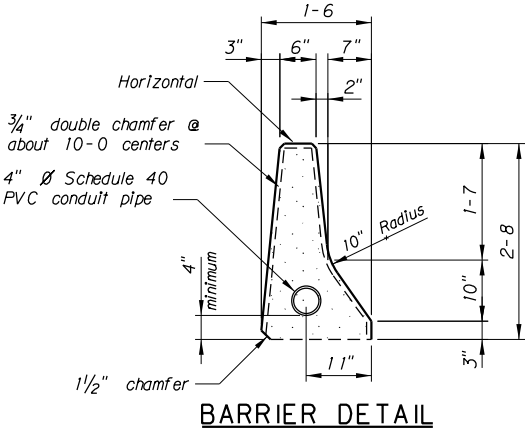
NOTE: Loop ends and the optional loop detail consist of smooth round bars conforming to AASHTO M 270, Grade 36.

NOTE: Cold bend the loops by using a jig that will produce an accurate radius without marring the bar. Do not heat the bar to facilitate bending.



NOTE: Weld rebar to loops using 1/8" Ø E8018 rod. Do not tack weld the pieces together prior to welding. Use a certified welder in accordance with the current edition of AWS D1.4. Do not place the welded assembly in the form until it has been inspected.

NOTE: No additional welding is permitted on the smooth round bars or reinforcing steel.



DRAWN	3-3-08	T. J. B.
CHECKED	3-12-08	D. J. R.
APPROVED	3-26-08	D. F. J.
REVISED	2-1-11	D. F. J.
REVISED	1-2-12	SLFB
REVISED		
REVISED		
REVISED		

STANDARD BRIDGE RAIL  
TYPE BARRIER

No Scale

MDT Montana Department of Transportation